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Purpuricenus globulicollis Dejean in Mulsant, 1839 — a Mediterranian longicorn-beetle (Coleoptera: Cerambycidae) in the fauna of Russia and Kazakhstan

Purpuricenus globulicollis Dejean in Mulsant, 1839 — средиземноморский жук-усач (Coleoptera: Cerambycidae) в фауне России и Казахстана

M.L. Danilevsky[1], S.V. Dedyukhin[2], L.V. Egorov[3], R.Kh. Kadyrbekov[4], D.G. Kasatkin[5] & A.M. Shapovalov[6]

М.Л. Данилевский[1], С.В. Дедюхин[2], Л.В. Егоров[3], Р.Х. Кадырбеков[4], Д.Г. Касаткин[5], А.М. Шаповалов[6]

[1] A.N. Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospect 33, Moscow 119071, Russia. E-mail: dorcadion@telecont.ru

[2] Department of animal ecology, Udmurt State University, Universitetskaya str. 1, Izhevsk 426034, Russia. E-mail: ded@uni.udm.ru

[3] Chuvash State Pedagogical University, K. Marks str. 38, Cheboksary 428000, Russia. E-mail: platyscelis@rambler.ru

[4] Institute of Zoology, Academgorodok, Alma-Ata 480060, Kazakhstan; InstZoo@nursat.kz

[5] All Russian Centre of Plant Quarantine, 20th line str. 43/16, Rostov-na-Donu 344037 Russia. E-mail: kassatkind@mail.ru

[6] Institute of Steppe, Urals Branch of the Russian Academy of Sciences, Pionerskaya str. 11, Orenburg 460000, Russia. E-mail: Andrej-Shapovalov@yandex.ru

[1] Институт Проблем Экологии и Эволюции им. А.Н. Северцова РАН, Ленинский пр. 33 Москва 119071, Россия.

[2] Кафедра экологии животных, Удмуртский государственный университет, ул. Университетская 1, Ижевск 426034, Россия.

[3] Чувашский государственный педагогический университет им. И.Я. Яковлева, ул. К. Маркса 38, Чебоксары 428000, Россия.

[4] Институт зоологии РК, Академгородок, Алма-Ата 480060, Казахстан.

[5] Всероссийский центр карантина растений, ул. 20-я линия 43/16, Ростов-на-Дону 344037, Россия.

[6] Институт степи, Уральское отделение Российской Академии наук, ул. Пионерская 11, Оренбург 460000, Россия.

KEY WORDS: Coleoptera, Cerambycidae, *Purpuricenus,* Russia, Kazakhstan, area, new localities, new synonym.

КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Cerambycidae, *Purpuricenus,* Россия, Казахстан, ареал, новые находки, новый синоним.

ABSTRACT: *Purpuricenus globulicollis* Dejean in Mulsant, 1839 is widely distributed in Russia from West Siberia and Urals to central and south regions of European part; it was discovered in north Kazakhstan. The species was usually mixed in Russia with *P. kaehleri* (Linnaeus, 1758); distinguishing characters are listed. Photographs of several specimens from different regions are published. A map of the whole area of the species and a map of localities in Russia and Kazakhstan are composed. New synonym is proposed: *Purpuricenus globulicollis* Dejean in Mulsant, 1839 = *P. tsherepanovae* Tsherepanov, 1980, **syn.n.** *P. menetriesi* Motschulsky, 1845 described from Gilan (north Iran) and regarded before as a synonym of *P. kaehleri* or as a subspecies *of P. globulicollis*, accepted now as *P. kaehleri menetriesi* Motsch. and recorded for Mazandaran and Talysh (Azerbajdzhan).

РЕЗЮМЕ: *Purpuricenus globulicollis* Dejean in Mulsant, 1839 широко распространён в России от Западной Сибири и Урала до центральных и южных районов Европейской части, найден в северном Казахстане. В России вид обычно смешивался с *P. kaehleri* (Linnaeus, 1758). Перечислены отличительные признаки двух видов; приведены фотографии нескольких экземпляров *P. globulicollis* из различных регионов; составлены карта полного ареала вида и карта с указанием мест находок в России и Казахстане; установлен новый синоним *Purpuricenus globulicollis* Dejean in Mulsant, 1839 = *P. tsherepanovae* Tsherepanov, 1980, **syn.n.** *P. menetriesi* Motschulsky, 1845 описанный из Гилана (северный Иран) и считавшийся то синонимом *P. kaehleri*, то подвидом *P. globulicollis,* рассматривается как *P. kaehleri menetriesi* Motsch. и приводится для Мазандарана и Талыша (Азербайджан).

Purpuricenus globulicollis Dejean in Mulsant, 1839 was described from "Dighne" (France). Sometimes [Plavilstshikov, 1940; Heyrovsky, 1955; Kaszab, 1971] it was wrongly regarded as a "morpha" of *P. kaehleri* (Linnaeus, 1758), but most of authors always adequately recognized this very distinct species [Aurivillius, 1912; Kantardjiewa-Minkova, 1932; Mikšić, 1963; Villiers, 1978; Sama, 2002]. Russian authors [Novozhenov, 1987; Lagunov, Novozhenov, 1996; Adakhovsky et al., 2001; Isaev et al., 2004 and many others], following N.N. Plavilstshikov, identified specimens of *P. globulicollis* as *P. kaehleri*.

Recently the first correct identification of Russian *P. globulicollis* was published [Shapovalov et al., 2006] for the specimens from the east of Orenburg region.

Careful comparison of available specimens of *P. globulicollis* with the original description of *P. tsherepanovae* Tsherepanov, 1980, with a photo of the holotype-female [WEB-site of Siberian Zoological Museum, 2006] of *P. tsherepanovae* Tsherepanov, 1980 (Fig. 1) and with a pair from Siberia (Figs 2–3) allowed us to realize, that: *Purpuricenus globulicollis* Dejean in Mulsant, 1839 = *P. tsherepanovae* Tsherepanov, 1980, **syn.n.**

Material deposited: cAI — coll. of A.Yu. Isaev, Ulianovsk; cASh — coll. of A.M. Shapovalov, Orenburg; cDK– coll. of D.G. Kasatkin, Rostov-na-Donu; cIG — coll. of I.B. Golovachev, Ekaterinburg; cIM — coll. of I.V. Melnik, Moscow; cLE — coll. of L.V. Egorov, Cheboksary; cMD — coll. of M.L. Danilevsky, Moscow; cRK — coll. of R.Kh. Kadyrbekov; cSD — coll. of S.V. Dedyukhin, Izhevsk; cVO — coll. of V.S. Okulov (Izhevsk); USU — coll. of Ural State University, Ekaterinburg; ZMMU — coll. of Zoological Muzeum of Moscow University, Moscow.

Purpuricenus globulicollis Dejean, 1839 (Figs 1–14)

Purpuricenus globulicollis Dejean in Mulsant, 1839: 34; Aurivillius, 1912: 463; Winkler, 1929: 1183; Kantardjiewa-Minkova, 1932: 99; Porta, 1934: 195; Panin & Savulesku, 1961: 363; Mikšić, 1963: 122; Villiers, 1978: 313; Angelov, 1995: 145; Bense, 1995: 247; Sama, 2002: 55; Shapovalov et al., 2006: 106.

Purpuricenus kaehleri morpha *globulicollis,* Plavilstshikov, 1940: 564; Heyrovsky, 1955: 239; Kaszab, 1971: 202.

Purpuricenus tsherepanovae Tsherepanov, 1980: 89, **syn.n.**; 1982: 220; Kadyrbekov et al., 2003: 37; Dedyukhin, 2003: 96; 2005: 87; Dedyukhin et al., 2005: 310.

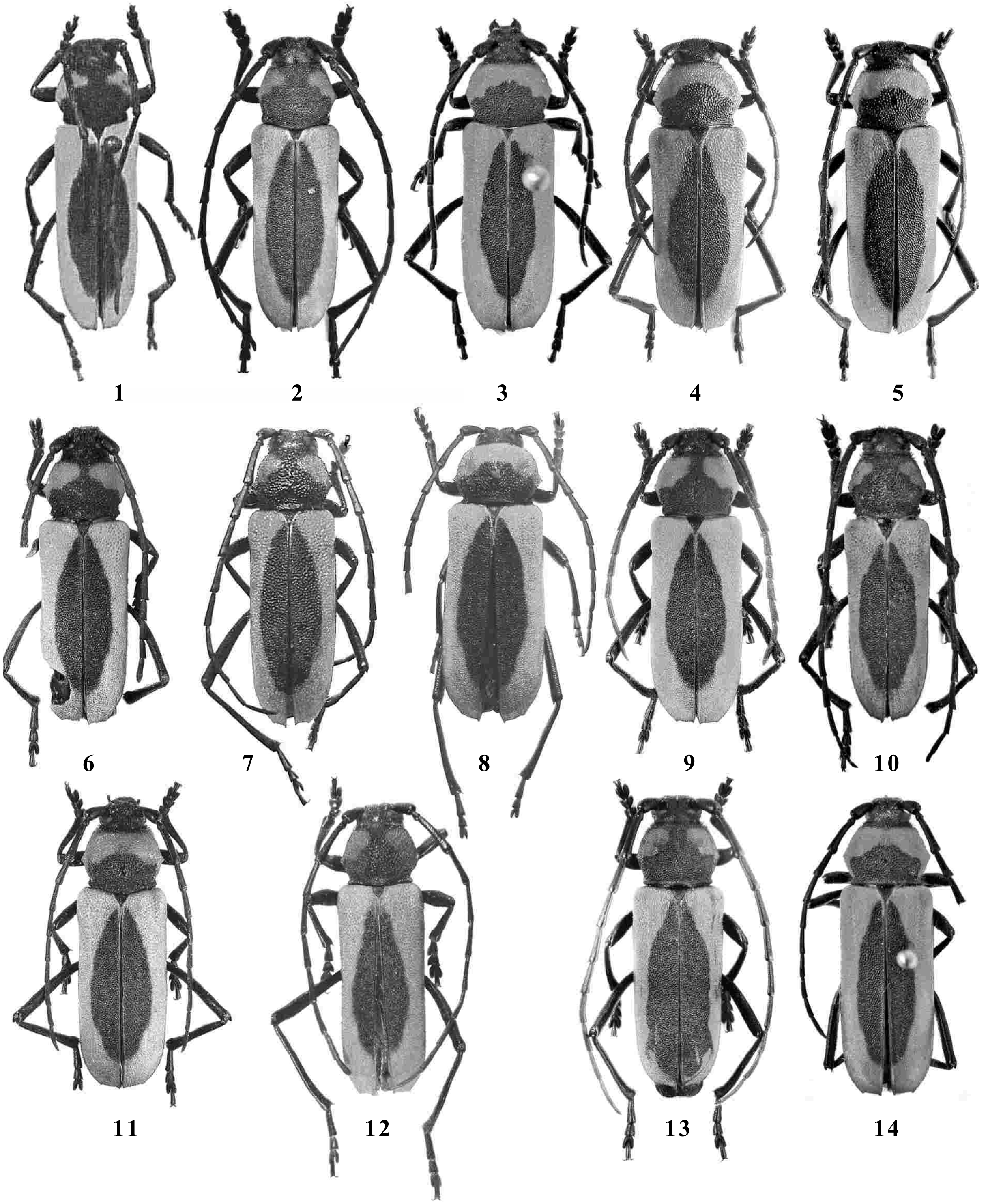
Purpuricenus kaehleri, Novozhenov, 1987: 41; Lagunov & Novozhenov, 1996: 63; Adakhovsky et al., 2001: 27; Isaev et al., 2004: 40, part.

MATERIAL. ♂, France, Aiguines, 2.8.1982. P. Berger leg. [cMD]; ♂ and ♀ from same locality, 1983, P. Berger leg. [cMD]; 3 ♂♂, 3 ♀♀, Slovenia, Mt. Nanos, 17.6–4.7.2005, P. Rapuzzi leg. [cMD]; ♂ (identified as *P. kaehleri* by L.N. Medvedev) with a label: "Uspenka [30km W Tiumen], *Populus trem.*, 27.6.1958 [L.N. Medvedev leg.]" [ZMMU]; ♂ (identified as *P. kaehleri* by N.N. Plavilstshikov) with a label: "Kuzbas, mouth of Suriekova river [Kemerovo reg., left tributary of Tom river, 50km NE Novokuznetzk,], 10.7.1951, E. Kuznetzova leg." [ZMMU]; ♀, Russia, Altaj, Teletzkoe lake, Chiri, 15.VII.1999, P. Petrov leg. [cIM]; ♀, Russia, Sverdlovsk region, Sysert distr., Dvurechnyj, 2.7.2004, Sapronov leg. [cIG]; ♂, Russia, Kvarkeno distr., Bolotovskij Forest, Solonchanka river, *Betula* forest, *Betula* twig, 20.6.2006, A. Shapovalov leg. [cASh]; ♀, Russia, Orenburg region, Kvarkeno distr., Solonchanka river, 15–31.6.1997, Rumiantzev leg. [cASh]; ♀, Russia, "Orenburg, Skorniakov leg." [ZMMU]; ♂ and ♀, same locality, 28.6.2000 and 5.7.1997, Yu.I. Novozhenov leg. [USU]; ♂, Russia, Cheliabinsk reg., Ilmen nat. reserve, Tatkul lake, 1.8.1969, I.A. Poblaguev leg. [USU]; ♂, Russia, Udmurtia, Yakshur-Bodja distr., Begesh env., 30 km N Izhevsk, 6.2000, D.A. Adakhovsky leg. [cSD]; ♀, Russia, Udmurtia, Yakshur-Bodja distr., 9 km N Izhevsk, 19.7.1986, N.Yu. Popov leg. [cSD]; 1 female, Russia, Kirov reg., Kilmez river, Tautovo, D.A. Adakhovsky leg. [cVO]; ♀, Russia, Chuvashia, Alatyr distr., 1.5 km S Atrat, 16.7.1999, L. Egorov leg. [cLE]; ♀, Russia, "Voronezh" [ZMMU]; ♂, Russia, Lipetsk region, Griazi env., Arkharova leg. [cMD]; ♀, Russia, Ulianovsk reg., Kuzovatovo distr., Chekalinskoe lake, 1.7.1998, A. Isaev leg. [cAI]; ♂, Russia, Rostov region, Sholokhovsky distr., Elanskaja, 7.1998, I. Shokhin leg. [cDK]; ♀, Russia, Volgograd reg., "Filonovskaja, prov. Donensis, 18.6.1911, Iliinskij leg." [ZMMU]; ♂, Russia, Volgograd reg., "Stalingrad reg., Krasnyj Yar, 8.7.1960, M. Lurie leg." [ZMMU]; ♀, Russia, Volgograd-city, Beketovka, 11.6.1951, G. Mazokhin leg. [ZMMU]; ♂, Kazakhstan, Kokchetav highland, national park "Burabaj" (near Schuchinsk-Borovoe), Dzhusy lake, Kyzyl-Ium, 8.7.2002, L. Gromov leg. [cRK]; ♂, ♀, Kazakhstan, Kustanaj reg., Naurzum, 23.7.1931" [ZMMU]

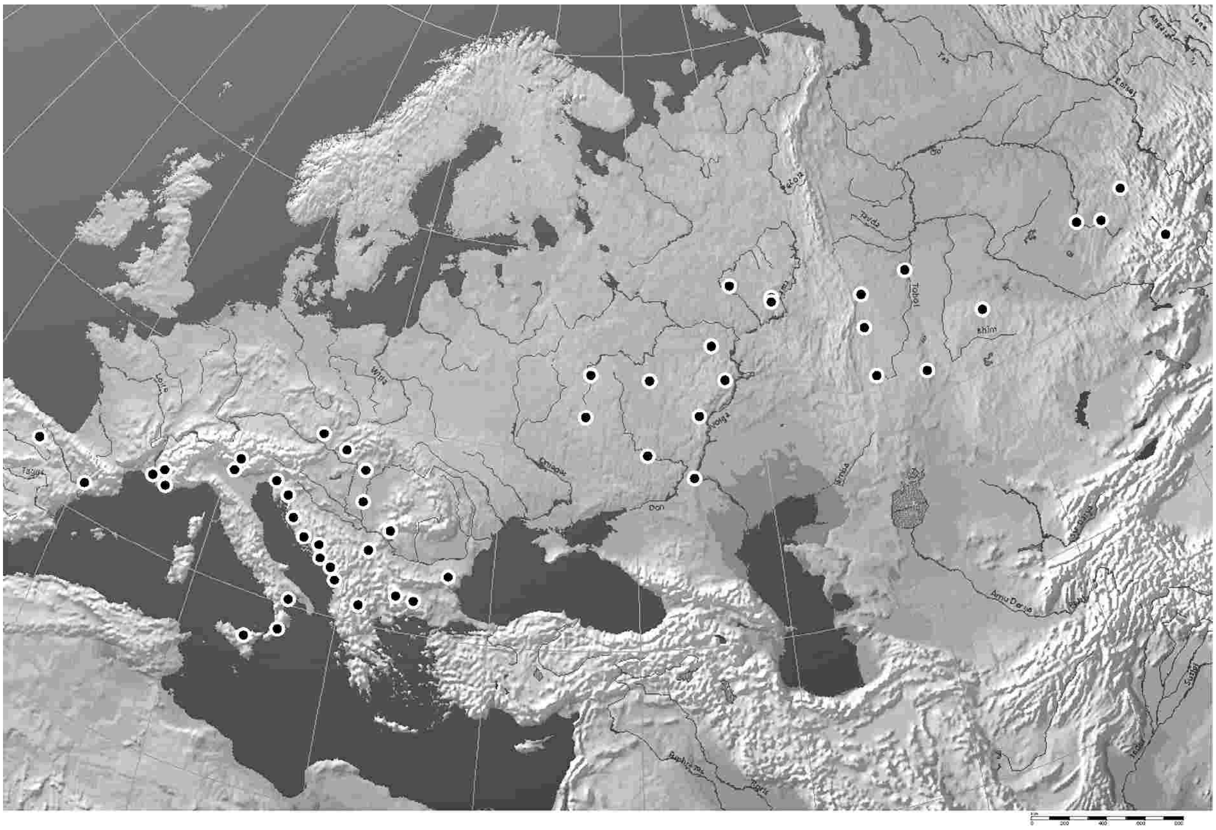
DIAGNOSIS. The species is similar to *P. kaehleri* by elytral design with central elongated black area, but differs by longer body, shorter antennae, small thoracic lateral spines, strong apical emargination of each elytron; punctation of elytral apices moderately finer than punctation of elytral base, while in *P. kaehleri* apical elytral punctation much finer than punctation of elytral base; besides in most of Russian populations of *P. kaehleri* pronotum is usually totally black (or with very small lateral red spots), but in *P. globulicollis* from Russia or Kazakhstan anterior part of pronotum is totally red or red lateral spots are relatively big. A series of *P. kaehleri* (4 females from "Maikop": 20.7.1937, 12.7.1938 and 29.6.1939) from north-west Caucasus (preserved in the Museum of Moscow State University) consists of small specimens with nearly totally red prothorax and possibly represents a local subspecies. Generally in *P. kaehleri* from south populations (Transcaucasia or south Europe) red pronotal spots can be very big, or pronotum is nearly totally red, correspondingly in *P. globulicollis* from West Europe pronotum can be nearly totally black.

According to published data, the length of *P. globulicollis* is 8.5–19 mm, usually 12–15 mm. In available specimens from Russia and Kazakhstan the length of males: 11.8–16.0 mm, of females: 13.4–16.0 mm; the width of males: 3.6–5.1 mm, of females: 4.2–5.1 mm. The biggest male is from Kazakhstan. The biggest male from Russia is 15.5 mm (Orenburg

Рис. 1–14. *Purpuricenus globulicollis* из разных регионов России и Казахстана: 1 — ♀, *Purpuricenus tsherepanovae*, голотип, Чингиз на юго-западном берегу Новосибирского водохранилища, Новосибирская обл.; 2 — ♂, устье р. Суриёкова, Кемеровская обл.; 3 — Алтай, Телецкое оз., Чири; 4 — ♀, Двуречный, Сысертский р-н, Свердловская обл.; 5 — ♀, р. Суундук, Кваркенский р-н, Оренбургская обл.; 6 — ♀, окр. Болотовска, р. Солончанка, Кваркенский р-н, Оренбургская обл.; 7 — ♂, окр. Бегеш, 30 км С Ижевска; 8 — ♀, р-н Якшур-Бодья, 9 км С Ижевска, Удмуртия; 9 — ♀, 1.5 км Ю Атрата, Алатырский р-н, Чувашия; 10 — ♂, окр. Грязи, Липецкая обл.; 11 — ♀, оз. Чекалинское, Кузоватовский р-н, Ульяновская обл.; 12 — ♂, Еланская, Шолоховский р-н, Ростовская обл.; 13 — ♂, Кызыл-Юм, оз. Джусы, национальны парк "Бурабай" (близ Щучинск-Боровое), Кокчетавская обл.; 14 — ♀, Наурзум, Кустнанайская обл.



Figs 1–14. *Purpuricenus globulicollis* from different regions of Russia and Kazakhstan: 1 — ♀, holotype of *Purpuricenus tsherepanovae* — Russia, Novosibirsk reg., Chingis on the south-west bank of Novosibirsk reservoir; 2 — ♂, Russia, Kemerovo reg., mouth of Suriekovo river; 3 — ♀, Russia, Altaj, Teletzkoe lake, Chiri; 4 — ♀, Russia, Sverdlovsk region, Sysert distr., Dvurechnyj; 5 — ♀, Russia, Orenburg region, Kvarkeno distr., Suunduk river; 6 — ♀, Russia, Kvarkeno distr., Bolotovskij Forest, Solonchanka river; 7 — ♂, Russia, Udmurtia, Yakshur-Bodja distr., Begesh env., 30km N Izhevsk; 8 — ♀, Russia, Udmurtia, Yakshur-Bodja distr., 9 km N Izhevsk; 9 — ♀, Russia, Chuvashia, Alatyr distr., 1.5km S Atrat; 10 — ♂, Russia, Lipetsk region, Griazi env.; 11 — ♀, Russia, Ulianovsk reg., Kuzovatovo distr., Chekalinskoe lake; 12 — ♂, Russia, Rostov region, Sholokhovsky distr., Elanskaja; 13 — ♂, Kazakhstan, Kokchetav highland, national park “Burabaj” (near Schuchinsk-Borovoe), Dzhusy lake, Kyzyl-Ium. 14 — ♀, Kazakhstan, Naurzum.



Map 1. Localities of *Purpuricenus globulicollis*: the whole area of the species in Europe and Asia.
Карта 1. Места находок *Purpuricenus globulicollis* в Европе и Азии.

reg.). The length of the specimens from type series of *P. tsherepanovae* is 13–14 mm [Tsherepanov, 1980] or 14–15 mm [Tsherepanov, 1982].

DISTRIBUTION. *P. globulicollis* is distributed from South Europe (Map 1) to West Siberia. The area of the species is not quite clear as in many records it was mixed with *P. kaehleri*. The figured localities in West Europe (Map 1) agree with a map by U. Bense [1995] with several additions. It is known from south-east France, Italy (but old records from Sicily need confirmation), Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Greece, Bulgaria, Rumania, Hungary; the species was also recorded from Czechia and Slovakia [Sláma, 1992, 1998] and from Spain [Vives, 2000].

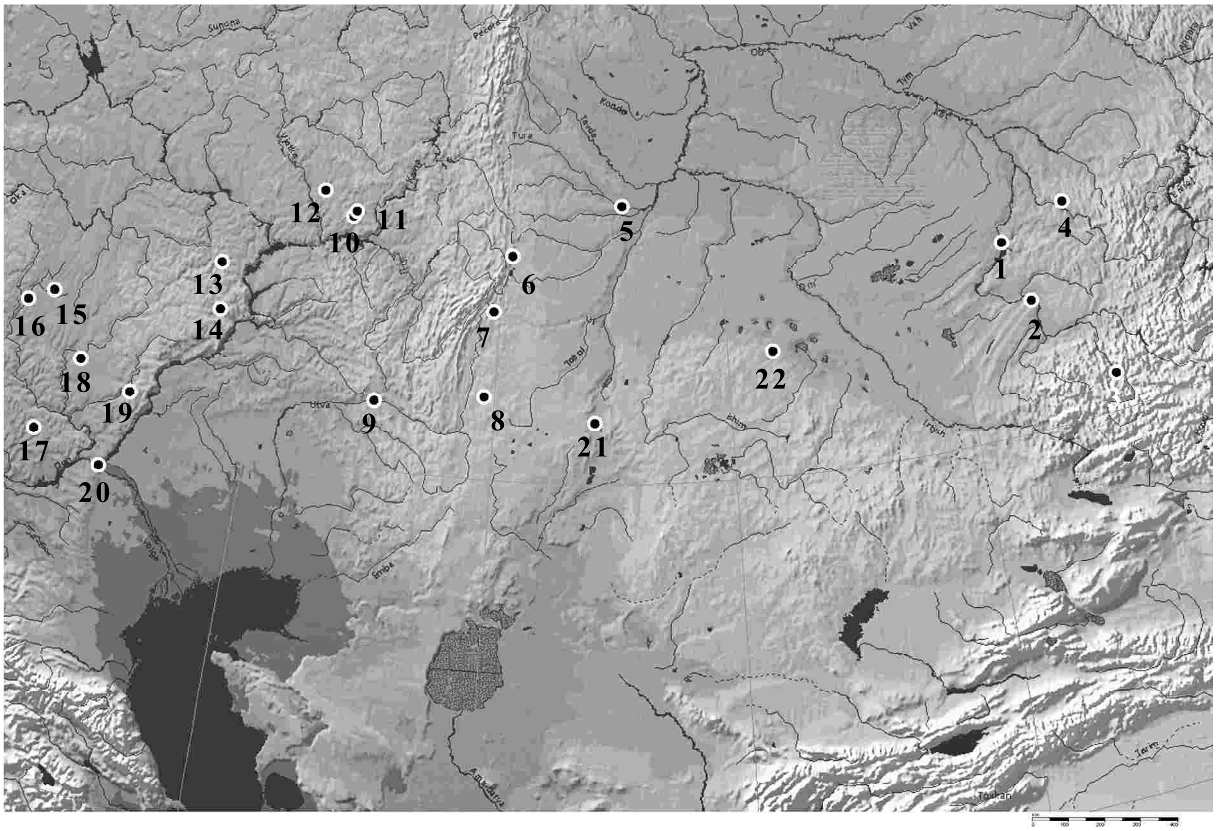
Known localities in Russia (Map 2, 1–20) are: **West Siberia** — (1) Chingis on the south-west bank of Novosibirsk reservoir, Novosibirsk reg., type locality of *P. tsherepanovae* Tsherepanov, 1980 on the base of a single holotype female (Fig. 1), preserved in Siberian Zoological Museum, Novosibirsk; (2) Barnaul environs, according to the original description of *P. tsherepanovae* Tsherepanov, 1980, one paratype male is preserved in Siberian Zoological Museum, Novosibirsk; (3) Altaj, Teletzkoe lake, Chiri; (4) Kemerovo reg., Suriekovo river — left tributary of Tom river, 50km NE Novokuzneztk; (5) Uspenka, 30km W Tiumen; (6) Dvurechnyj, Sysert distr., Sverdlovsk reg.; (7) Miassovo lake, about 20km NE Miass, Cheljabinsk reg., recorded by Yu.I. Novozhenov [1987, as *P. kaehleri*]; Tatkul lake, Ilmen natural reserve Cheljabinsk reg. — about same locality; (8) Bolotovsk env., Solonchanka river Kvarkeno distr., Orenburg reg.; **European part** — (9) Orenburg env.; (10) Yakshur-Bodja distr., 9 km N Izhevsk, Udmurtia; (11) Umrinka river, 3km E Begesh, 30km N Izhevsk; (12) Tautovo (56°58'N,51°16'E), Kilmez river, Kirov reg.; (13) 1.5km S Atrat, Alatyr distr., Chuvashia; (14) Chekalinskoe lake, Kuzovatovo distr., Ulianovsk reg.; (15) Griazi env., Lipetsk reg.; (16) Voronezh env., (17) Elanskaja, Sholokhovsky distr., Rostov reg.; (18) Filonovskaja, Volgograd reg.; (19) Krasnyj Yar, Volgograd reg.; (20) Beketovka, Volgograd-city.

Known localities in Kazakhstan (Map 2, 21–22) are: (21) Naurzum, Kustanaj reg.; (22) Kyzyl-Ium, Dzhusy lake, national park "Burabaj" (near Schuchinsk-Borovoe), Kokchetav highland, Kokchetav reg.

We do not know specimens from Ukraine, but *P. globulicollis* is definitely distributed here.

According to N.N. Plavilstshikov [1940] and A.I. Tsherepanov [1982], the eastern limits of *P. kaehleri* are Urals, but in reality this species is also widely distributed in West Siberia. There is a female in the collection of Zoological Museum of Moscow University with a label: "Tomsk region, Altaj, upper level of Tom river, 1915".

BIONOMY. The species is regarded everywhere as relatively rare. In West Europe it is known as rather polyphagous. It was recorded [Sama, 2002] for *Quercus, Crataegus, Acer, Prunus, Rhamnus.* Specimens collected in Kazakhstan were connected with *Salix*. A male collected in Orenburg region by A. Shapovalov was observed in *Betula* forest crawling along *Betula* twig. A male from Uspenka (Tiumen reg.) was collected on *Populus tremula*. Sometimes our specimens of *P. globulicollis* were observed in the localities where *Quercus* trees are absent. *P. kaehleri* just contrary is usually connected with *Quercus* in Russia. According to G. Sama [2002]: "The eggs are laid in thin lateral living twigs near their bases, close to apices of main twigs. Young larvae feed



Map 2. Localities of *Purpuricenus globulicollis* in Russia (1–20) and Kazakhstan (21–22): 1 — Chingis on the south-west bank of Novosibirsk reservoir, Novosibirsk reg., type locality of *P. tsherepanovae*; 2 — Barnaul environs; 3 — Altaj, Teletzkoe lake, Chiri; 4 — mouth of Suriekovo river, Kemerovo reg.; 5 — Uspenka, 30km W Tiumen; 6 — Dvurechnyj, Sysert distr., Sverdlovsk reg.; 7 — Miassovo lake, about 20km NE Miass, Cheliabinsk reg.; 8 — Bolotovsk env., Solonchanka river, Kvarkeno distr., Orenburg reg.; 9 — Orenburg env.; 10 — Yakshur-Bodja distr., 9 km N Izhevsk, Udmurtia; 11 — Umrinka river, 3km E Begesh, 30km N Izhevsk; 12 — Tautovo, Kirov reg.; 13 — 1.5km S Atrat, Alatyr distr., Chuvashia; 14 — Chekalinskoe lake, Kuzovatovo distr., Ulianovsk reg.; 15 — Griazi env., Lipetsk reg.; 16 — Voronezh env.; 17 — Elanskaja, Sholokhovsky distr., Rostov reg.; 18 — Filonovskaja, Volgograd reg.; 19 — Krasnyj Yar, Volgograd reg.; 20 — Beketovka, Volgograd-city; 21 — Naurzum, Kustanaj reg.; 22 — Kyzyl-Ium, Dzhusy lake, national park "Burabaj" (near Schuchinsk-Borovoe), Kokchetav highland, Kokchetav reg.

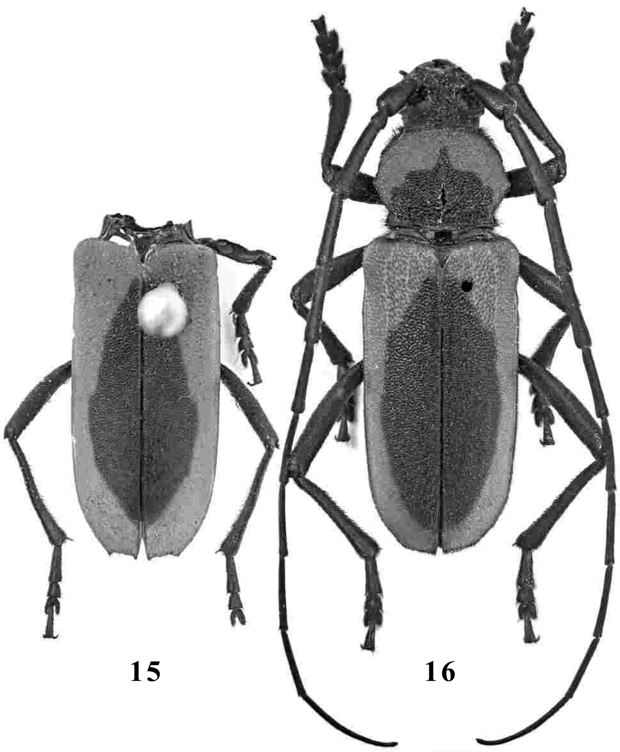
Карта 2. Места находок *Purpuricenus globulicollis* в России (1–20) и Казахстане (21–22): 1 — Чингиз на юго-западном береге Новосибирского водохранилища, Новосибирская обл., типовой локалитет *P. tsherepanovae*; 2 — окрестности барнаула; 3 — Алтай, Телецкое оз., Чири; 4 — устье р. Суриёково, Кемеровская обл.; 5 — Успенка, 30 км З Тюмени; 6 — Двуречный, Сысертский р-н, Свердловской обл.; 7 — оз. Миассово, 20 км СВ Миасса, Челябинская обл.; 8 — окр. Болотовска, р. Солончанка, Кваркенский р-н, Оренбургская обл.; 9 — Оренбург; 10 — Якшур-Бодьинский р-н, 9 км С Ижевска, Удмуртия; 11 — р.Умринка, 3 км В Бегеша, 30 км С Ижевска; 12 — Таутово, Кировская обл.; 13 — 1,5 км Ю Атрата, Алатырский р-н, Чувашия; 14 — оз. Чекалинское, Кузоватовский р-н, Ульяновская обл.; 15 — Грязи, Липецкая обл.; 16 — Воронеж; 17 — Еланская, Шолоховский р-н, Ростовская обл.; 18 — Филоновская, Волгоградская обл.; 19 — Красный Яр, Волгоградская обл.; 20 — Бекетовка, р-н г.Волгоград; 21 — Наурзум, Кустанайская обл.; 22 — Кызыл-Юм, оз. Джусы, национальный парк "Бурабай", Кокчетавская обл.

internally descending to main twigs where they dig a spiral girdle, which interrupts the sap circulation and causes the drying of the twig. Yellow dead leaves best indicate larval presence. Life cycle — two years." Such way of development was proved by personal observations of P. Rapuzzi and P. Kabatek. Imagoes are active from June to August. They could be observed on food plants or sometimes on flowers.

P. kaehleri just contrary is known to lay eggs in dead twigs or stems. P. Rapuzzi (personal message) observed the development of *P. kaehleri menetriesi* Motsch. (see below) in north Iran in dead stems of *Paliurus,* as well as M. Danilevsky in Talysh, south Azerbajdzhan.

REMARKS. The original description of *P. tsherepanovae* was based on two specimens from West Siberia: a female, holotype (Fig. 1), "Russia, Novosibirsk province, Ordynskoe distr., Chingisy (= Chingis on the south-west bank of Novosibirsk reservoir), 21.VII 1960, Galimov leg." and a male, paratype, Russia, "Barnaul, 12.VII 1967". All characters listed by A.I. Tsherepanov [1980] for distinguishing of his *P. tsherepanovae* from "*P. kaehleri* m. *globulicollis*" (short hind femora, narrow body, short antennae) can not be proved with available materials — in fact just *P. globulicollis* has relatively shorter hind femora, narrow body and relatively shorter antennae.

We have studied the collection materials, which were the base for the records of *P. kaehleri* for Cheliabinsk reg. [Novozhenov, 1987; Lagunov & Novozhenov, 1996] and Ulianovsk reg. [Isaev et al., 2004]. All *Purpuricenus* specimens from Cheliabinsk reg. belong to *P. globulicollis*. Among seven *Purpuricenus* specimens from Ulianovsk reg. (preserved in A.Yu. Isaev's collection) one female belongs to *P. globulicollis*.



Figs. 15–16. *Purpuricenus kaehleri menetriesi*: 15 — holotype with the label: "*Purpuricenus menetriesi* Dej. Persia, Astrabad"; 16 — male with the label: "Astrabad IV"

Рис. 15–16. *Purpuricenus kaehleri menetriesi*: 15 — голотип с этикетками: "*Purpuricenus menetriesi* Dej. Persia, Astrabad"; 16 — самец с этикеткой: "Astrabad IV"

The species was recorded for Kazakhstan [Kadyrbekov et al., 2003] on the base of male and female, as *P. tsherepanovae*.

The specimens which were used for the records of *P. tsherepanovae* for Udmurtia [Dedyukhin, 2003, 2005; Dedyukhin et al., 2005] are available now for the determination. All belong to *P. globulicollis*.

A male from Kazakhstan (Fig. 13) differs from all others not only by very big size, but also by relatively long black elytral spot. Unfortunately a female from the same series is not available now. Kazakhstan female from Naurzum (Fig. 14) has typical for the species elytral design, as well as a male from Naurzum.

The taxon, described as *Purpuricenus menetriesi* Motschulsky, 1845 from Astrabad (now Gorgan) and then redescribed as *Purpuricenus kaehleri* var. *astrabadensis* Pic, 1915 from the same locality was traditionally regarded [Aurivillius, 1912; Plavilstshikov, 1940] as a form of *P. kaehleri*. Then it was published [Brunneau de Miré, 1990] as *P. globulicollis* ssp. *astrabadensis* Pic, 1915. G. Sama [2002] rejected the record by Brunneau de Miré [1990] of the species for North Africa (Algerie), but accepted its occurrence in North Iran as probable. The holotype (with the label:"*Purpuricenus menetriesi* Dej. Persia, Astrabad") of *P. menetriesi* (Fig. 15) is represented now by elytra, mesothorax, metathorax and three legs only, but it is quite enough to constate the conspecifity of the holotype with four males from same locality ("Astrabad, 19.4.1917" and „Astrabad IV" — Fig. 16), deposited in the collection of the Museum of Moscow State University. Elytra in the holotype are as wide as in normal *P. kaehleri*, but apical elytral emargination is well developed, which is similar to *P. globulicollis*. The development of elytral emargination in series of 4 males from Astradad is very different; elytral angles can be totally obliterated (Fig. 16). Antennae in specimens from Astrabad are very long — just as in *P. kaehleri*. We do not know Pic's types, but M. Pic [1915] underlined: "elytris, ..., apicis ... subtruncatis, angulis rotundatis." and "Cette variété se distingue ... par l'angle sutural des élytres tout à fait émoussé" — just as in figured specimen from Gorgan (=Astrabad). So, elytral width, shape of elytral apices, as well as long antennae in Gorgan population are similar to *P.kaehleri* and differs from *P.globulicollis*. But thoracic spines are nearly totally reduced, that is similar to *P. globulicollis*. We preliminary identify Gorgan population as *P. kaehleri menetriesi* Motschulsky, 1845 (= *P. k.* var. *astrabadensis* Pic, 1915).

We also regard as *P. k. menetriesi* Motsch. series from Gilan (7 males, 3 females: „Gilan, 10 km E Tutkabon, E Rostam Abad, 350m, 22.6–2.7.2003, I. Rapuzzi leg.") and series from Mazandaran (1 male, 1 female: „Mazandaran, 40 km E Chalus, ex *Paliurus* sp., 600m, 6.5.2002, P. Rapuzzi leg.) — both in the collection of P. Rapuzzi; as well as a series from Azerbaidzhan (two males, one female: "Azerbajdzhan, Talysh, Avrora, ex *Paliurus spina-christi,* 18.6.1980, M.Danilevsky leg.") in the collection of M. Danilevsky.

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